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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/637,791	08/11/2000	Anthony J. DiMaio	D-6384	8628
7590 08/31/2004				
Raymond D Thompson		EXAMINER		
Uniroyal Chemical Company Inc		DANG, THUAN D		
World Headquarters		ART UNIT		
Middlebury, CT 06749		PAPER NUMBER		
		1764		

DATE MAILED: 08/31/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/637,791

Applicant(s)

DIMAIO ET AL.

Examiner

Thuan D. Dang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 5, it is unclear to which “liter” in “millimoles/liter” is applied.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 6, and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Stricklen (5,064,797).

Stricklen discloses a process of polymerization of an olefin such as ethylene in the presence of hydrogen and a catalyst containing a metallocene substantially the same as the applicants’ claimed one and aluminoxane (the abstract; col. 7, lines 40-68) to produce a polyolefin. Note that ethylene is also an alpha olefin.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 2-4, 5, 7, 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stricklen (5,064,797).

Stricklen discloses a process as discussed above.

Stricklen does not disclose that alkyl groups in the bridging group R are cyclic (col. 7, lines 58-60), instead of generally alkyl. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the Stricklen process by using bridging R groups having cyclic alkyl since it is expected that using any alkyl group would yield similar results.

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Regarding claim 4, Stricklen disclose that (CpRm)s are substituted-cyclopentadienyl or cyclopentadienyl (col. 7, lines 42-53).

Also, regarding claim 4, while applicants claim that X is chlorine, Stricklen discloses using general halogen (col. 7, lines 60-63).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the Stricklen process by using chlorine since it is expected that using any halogen would yield similar results.

It appears that Stricklen does not disclose the concentration of the metallocene over the liter as called for in claim 5 (see the entire patent for details; also the above 112 rejection). However, It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the Stricklen process by employing an appropriate concentration of the catalyst to optimize the process. Further, it is expected that using any concentration would yield similar results.

Regarding claims 7 and 8, Stricklen appears to be silent as to using an olefin other than ethylene. However, it is expected that any olefin which has a double bond would polymerized by the Stricken method.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

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A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-9 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-6, 9, and 10 of copending Application No. 10/014,911. Although the conflicting claims are not identical, they are not patentably distinct from each other because the conflicting claims disclose a process substantially the same as the applicants' claimed process except that the presently claimed process does not recite a bulky olefin in the feed. However, the claimed process does not exclude out this olefin.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Response to Arguments***

Applicant's arguments filed on 6/14/2004 have been fully considered but they are not persuasive.

The argument that referring to the specification, page 9, lines 12-19, one skilled in the art, upon reading claim 5 in light of the specification would be apprized as to what is being claimed is not persuasive since in this disclosure do not define to which the term liter is referred. Therefore, the 112, 2<sup>nd</sup> rejection is maintained.

The argument that Stricklen neither discloses nor suggests that the ligands must be different and that the bridging group must contain two bulky groups is not persuasive

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since Stricklen clearly discloses ligands are different (col. 7, lines 52-54). Further, applicants do not define in the specification which group are considered to be the claimed "bulky group" (see the entire specification for details). Therefore, there is no difference able to be recognized between the "bulky group" and dialkyl disclosed by Stricklen (col. 7, lines 58-60).

The argument that the concept of bulkiness of substituent groups is recognized in organic chemistry and cannot be ignored. Those skilled in the art understand that bulky groups encompass those substituent groups is not persuasive since applicants do not define what the bulky groups are in the specification. Therefore, one having ordinary skill in the art cannot recognize the difference between the bulky groups in the claimed process and the alkyl group disclosed by Stricklen.

The argument against the rejection of claim 2-4, 5, 7, and 8 is similarly responded as above.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the

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advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

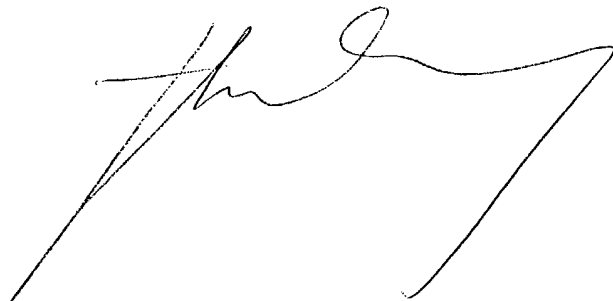
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thuan D. Dang whose telephone number is 571-272-1445. The examiner can normally be reached on Mon-Thu.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on 571-272-1444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thuan D. Dang  
Primary Examiner  
Art Unit 1764

09637791.20040826  
August 26, 2004

A handwritten signature in black ink, appearing to be 'Thuan D. Dang', written over a horizontal line.